NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION
The Voice of Rural Telecommunications
4121 Wilson Boulevard, Tenth Floor
Arlington, VA 22203
www.ntca.org

BILL AND KEEP:

IS IT RIGHT FOR RURAL AMERICA?

Prepared by the NTCA Intercarrier Compensation Work Group

Gerry Anderson, Mid Rivers Telephone Cooperative
Rich Coit, S.D. Telecommunications Association
Tom Conroy, Farmers Mutual Telephone Co.
Wendy Fast, Consolidated Telephone Co.
David Fox, Westphalia Telephone Co.
Ginny LeBoeuf, Cameron Communications Corp.
Jean Thaxton, Randolph Telephone Membership Corp.
Bill Cook, NECA
Bob Schoonmaker, GVNW Consulting
Jo Shotwell, CHR Solutions, Chairperson
Manny Staurulakis, John Staurulakis, Inc.
Scott Reiter, NTCA Staff

March 2004

TABLE OF CONTENTS

Executive Summary…… 1

I. Background……. 3
Purpose and Objectives of Intercarrier Compensation Work Group…… 3
The NTCA Intercarrier Compensation Data Request and Database……..…... 7

II. Central Office Bill and Keep (COBAK)…..……. 8
Overview……... 8
Rural Uniqueness……. 13
Current/Future Urban/Rural Rate Disparity……. 15
Financial Implications—Universal Service and End-user Customers……. 25
Network Considerations—Transport, Point of Termination and Transiting... 37

III. Conclusions……. 42

Figures

Figure 1. Carrier Responsibility Under COBAK……..…… 9
Figure 2. Average Lines per Local Switch..……. 14
Figure 3. Average Total Plant (Gross) Investment per Loop by Company Size...… 15
Figure 4. Avg. Local Calling Area per Dollar of Basic Rate by Size……..…….. 16
Figure 5. Comparison of Average Local and Toll Revenue Sources
Between Rural Carriers and Non-Rural Carriers……. 18
Figure 6. Median Average Calling Area by Study Area Size….……... 19
Figure 7. State Access Minutes per Line by Size of Study Area..……. 20
Figure 8. COBAK Impact/Line…….……. 22
Figure 9. Total COBAK Impact/Line by Size of Company…….……. 23
Figure 10. Number of Study Areas by Size of COBAK Impact per Line……. 24
Figure 11. Rural ILEC Revenue Sources……..……. 27
Figure 12. Intrastate Access Rates per Minute…….. 30
Figure 13. Intrastate COBAK Impact per Line…….. 31

EXECUTIVE SUMMARY

Today's telecommunications industry is marked by continuous and fundamental change. As a consequence, many parties contend that existing intercarrier compensation regimes, such as access charges, no longer are viable. In April 2001, the FCC issued a notice of proposed rulemaking (NPRM) seeking comment on replacing the current intercarrier compensation regimes with a unified system based upon bill and keep.

In order to be adequately prepared to address upcoming intercarrier compensation issues, the intercarrier compensation work group (work group) was formed in December 2002 and charged with determining whether bill and keep will work for its member companies, and what potential alternatives exist. Recognizing the lack of current, high-quality data, the working group submitted a data request to NTCA member companies in April 2003; 60% of the members responded.

Of the two bill and keep regimes proposed in the FCC's NPRM, Central Office Bill and Keep, or COBAK, has drawn the most interest and debate within the industry. Under the terms of COBAK, a carrier no longer could charge the calling party's network for termination of a call, but would recover the cost of the local loop from its own customers.

Implementation of COBAK would have far reaching financial implications for rural ILECs and their customers. Data collected by NTCA indicates that replacing today's access-charge regime with COBAK would eliminate more than $2 billion in annual access charges for rural incumbent local exchange carriers (ILECs) with study areas with less than 100,000 access lines. This is an average of $22 per line, per month. Furthermore, 10% of the study areas would lose more than $55 per line, per month. This

impact is significant because rural service areas are inherently more costly to serve than non-rural areas. The data shows that the smaller the company, the larger the impact. This indicates that special attention is warranted to ensure that all Americans continue to have access to comparable telecommunications services at affordable prices. The elimination of access charges would shift cost recovery away from interexchange carriers, who pay access charges to the LEC for originating and terminating retail toll calls, to rural ILECs and their end-user customers.

Among the deleterious impacts resulting from imposition of COBAK, or any other bill and keep regime, are: large increases in end-user charges; increases in universal service support, which will further strain the universal service fund; a likely difference in imposition of federal and state bill and keep, which would create opportunities for jurisdictional arbitrage; a redirection in customer choices for long-distance carrier; and a destruction of the interstate pooling process. The benefits of pooling are often overlooked, but two major advantages are comparable and affordable rates for all, and the spreading of risk among all pool participants. Risk sharing means that when a catastrophic event, such as an earthquake, tornado, hurricane, fire or other disaster occurs, a small carrier does not have to bear alone the cost of rebuilding; the cost is borne by all of the pool members.

Network issues related to transport, transiting and point of interconnect will take on added significance if bill and keep is implemented in the service areas of the rural ILECs. Transport costs could be shifted to the rural ILECs, even though these are legitimate business costs for retail interexchange carriers (IXCs) for use of the rural ILEC's networks to transport IXC retail toll services. Bill and keep could provide IXCs

an incentive to move their points of interconnection in a manner that disadvantages rural ILECs. Finally, rural ILECs would be required to negotiate transiting agreements with other carriers, while themselves lacking any meaningful leverage.

The bottom line is that COBAK and other bill and keep concepts threaten rural ILECs' cost-recovery mechanisms. Absent the creation of a new access mechanism, the elimination of the access-charge regime will impose a significant burden either to rural consumers or the Universal Service Fund (USF), or both. Simply put, COBAK, as proposed by the FCC in its NPRM, is not a financially feasible concept for rural ILECs. Without a sound financial base, rural ILECs will not be able to continue to provide the outstanding services and public benefits currently provided. Nor will they be able to invest in the infrastructure necessary to offer advanced services to all.

I. BACKGROUND

Purpose and Objectives of Intercarrier Compensation Work Group

In April 2001, the FCC issued an NPRM seeking comment on replacing the current intercarrier compensation regimes with a unified system based upon a "bill and keep" approach.[1] The FCC has never acted on the NPRM but is expected to issue a further notice of proposed rulemaking (FNRPM) on intercarrier compensation in spring 2004. This further notice will seek to refresh and expand the record to reflect today's telecommunications market.

[1] *In the Matter of Developing a Unified Intercarrier Compensation Regime,* CC Docket 01-92, FCC 01-132, released April 27, 2001 (NPRM).

In order for NTCA to be adequately prepared to address upcoming intercarrier compensation issues, the intercarrier compensation work group was formed in December 2002. The work group, at the direction of NTCA's Industry Committee, was charged with answering two fundamental questions:

- Will bill and keep work?
- What are the alternatives?

This paper focuses on the answer to the first question. NTCA is actively involved in various discussions taking place throughout the industry on alternatives. At this time no consensus has developed.

Since the early 1900s interconnection between telephone carriers has been considered necessary, and in a highly regulated telephone industry, compensation was linked to cost and cost recovery. While the process for setting compensation was not simple, it was deterministic.

Since passage of the 1996 Telecommunications Act, which introduced competition in local markets, the telecommunications industry has experienced fundamental change as it has transitioned from a unique monopoly industry to a more competitive industry that differs in character by service products and geographic markets. Although rural ILECs are facing competition in their service areas, it is at a much lesser degree than urban ILECs. However, as technology continues to accelerate competitive growth, the rural ILECs will feel increased competitive pressures. Today, rural ILECs are interconnecting with many telecommunications providers, including wireline, wireless, satellite, Internet and cable telephony. These providers offer a variety of

telecommunications services and many offer packages of services that bundle traditional and non-traditional services to attract the interest of rural customers.

Wireless, cable television (CATV) and the Internet are examples of technologies that are reshaping the telecommunications market. Changes in the types of services offered through technologies are blurring traditional distinctions between the local and toll markets and between intrastate and interstate jurisdictions. CATV providers are adding voice service, and Internet service providers (ISPs) are adding voice over Internet protocol (VoIP) to their existing Internet services. Even more important, wireless providers have become a major force in the industry. According to the FCC's Eighth Annual CMRS Competition Report, between January 1 and December 31, 2002, the wireless industry "generated over $76 billion in revenues, increased subscribership from 128.5 million to 141.8 million, and produced a nationwide penetration rate of roughly 49 percent."[2] As new technologies and services have been introduced, the FCC has consistently provided preferential regulatory treatment to new technologies and services to spur their growth. For example, the commission determined that ISPs are enhanced service providers and are end users of telecommunications services, not carriers. As such, ISP-bound traffic is considered local in nature and not subject to access charges, even though the commission has ruled that Internet traffic is mostly interstate in nature. Wireless service differs markedly from wireline service, but is viewed as a substitute for wireline service when customers accept lower quality service in return for mobility. The pricing and marketing of wireless differs greatly from wireline, as do the provider's

[2] *In the Matter of Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Eighth Report,* WT Docket No. 02-379, Released July 14, 2003, at 11.

service obligations. In addition, wireline ILECs are more highly regulated with equal access and carrier of last resort obligations that are not required of wireless providers.

As this industry transitions to a more competitive market, many parties contend that existing intercarrier compensation regimes, such as access charges, no longer are viable. Access charges are per-minute charges that IXCs pay to ILECs for use of the ILEC's network to originate and terminate interexchange or toll calls to their retail customers.

Access charges have been a principal source of cost recovery for rural ILECs since the break-up of AT&T. The NTCA data request, which will be discussed further below, shows that on average, 26.6% of the rural ILEC's total company revenues are derived from state and interstate access charges. Proposed changes to existing intercarrier compensation mechanisms threaten this significant revenue stream for the rural ILECs.

Any changes to existing intercarrier compensation may affect the Universal Service Fund support mechanisms and end-user rates. At a minimum, changes in intercarrier compensation will involve substantial shifts in the flow of payments between carriers. There is much concern among rural ILECs that changes in intercarrier compensation will threaten their financial viability, which in turn compromises their capability to provide services comparable to those provided in urban areas. Moreover, there is concern that rural customers may not be willing or able to absorb additional rate increases resulting from a change to bill and keep.

Furthermore, all of these changes are taking place in a telecommunications sector that has, over the past few years, experienced a boom and bust economic cycle. First

came the influx of new companies, followed by the bankruptcies of many of those same companies. The market crash severely affected market valuations for all telecommunications providers. Today, providers can only attract new financing for business plans that promise near-term positive cash flows.

While rural ILECs have not been affected as much by the downturn as have other telecommunications providers, rural ILECs are not immune to economic laws. Regulatory uncertainty creates a great deal of financial risk for rural ILECs. Proposals to replace today's access-charge regime with another regime, such as bill and keep, create further uncertainty.

The NTCA Intercarrier Compensation Data Request and Database

The work group quickly concluded that it could not adequately address the multitude of intercarrier compensation issues without factual data. The work group determined that no repository of data existed that met the needs required to fully address the rural ILECs' concerns.[3] Therefore, a subcommittee assessed data requirements and prepared a special data request to compile information on rural ILECs. Information was collected on company demographics, local and toll revenues, access revenues, interstate and intrastate rates, call volumes and trunking. The data subcommittee intensively reviewed all data submissions for completeness and accuracy. Data has been captured in a manner that will permit analysis of the varying impact of proposals by rate element, size of company and state. Such analyses are important because averages do not reveal the varying impact of proposals on individual companies. The resulting database can be

[3] In most cases, NTCA member companies are not required to submit data to the FCC. Also, the data available to the National Exchange Carrier Association (NECA) is limited to the interstate jurisdiction.

relied upon to reasonably estimate the impact of COBAK and other intercarrier compensation proposals on rural ILECs.

The data request was sent to all NTCA members in April 2003, accompanied by a campaign to educate members and encourage them to respond. A series of four webcasts were held to give prospective responders a line-by-line description of the data request. Participation was outstanding, with 317responses received - approximately a 60% response rate. In addition, almost 30 respondents were non-NTCA members. Individual company data was gathered, validated and aggregated. Individual company data is subject to a nondisclosure agreement and is not available. After extensive validation, 331 responses were included in the data analysis.

II. CENTRAL OFFICE BILL AND KEEP (COBAK)

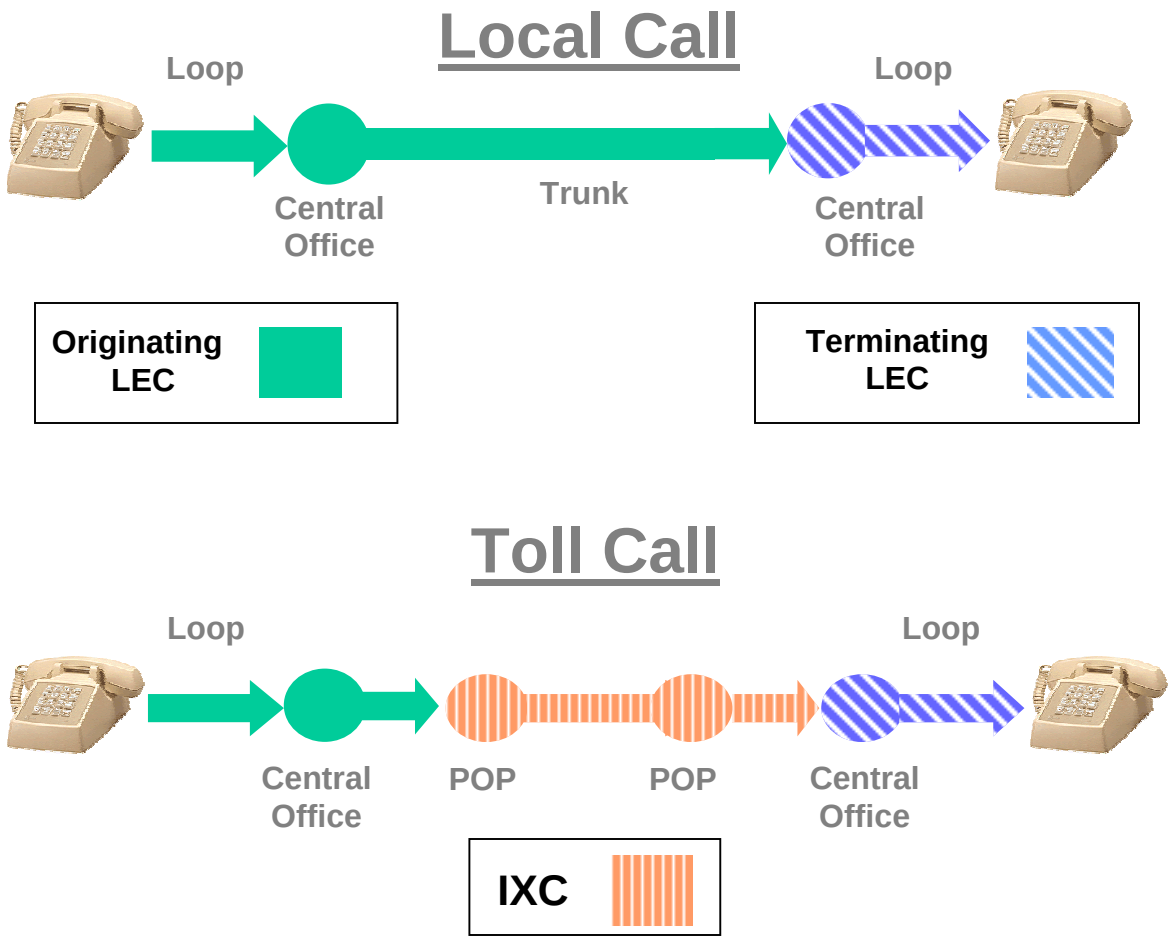
Overview

Of the two bill and keep regimes proposed in the FCC's NPRM, the intercarrier compensation regime known as Central Office Bill and Keep (COBAK) has drawn the most interest and debate within the industry. COBAK was proposed in a paper[4] authored by Patrick DeGraba. Under COBAK, a called party's network no longer would be allowed to charge the calling party's network for termination of a call--each carrier instead would recover the cost of the local loop and local switching from its own end-user customers. In addition, the calling party's network would bear responsibility for the

[4] Patrick DeGraba, *Bill and Keep at the Central Office as the Efficient Interconnection Regime*, Federal Communications Commission, OPP Working Paper No. 33, December 2000. (Available online at ftp://www.fcc.gov/pub/Bureaus/OPP/working_papers/oppwp33.pdf.)

cost of transporting a call between the calling party's network central office (CO) and the called party's CO (see Fig. 1). COBAK would be a default interconnection regime, to be utilized only when two networks cannot agree on terms for interconnection.

Figure 1. Carrier Responsibility Under COBAK



COBAK

DeGraba claimed that COBAK would address differences between interstate and intrastate access rates, the ISP exemption, and differences between access and reciprocal

compensation rates. He asserted that regulatory arbitrage distorts decision-making and encourages investment in inefficient facilities.[5] He called this the "terminating access monopoly problem." He conceded, however, that other problems remain, including the question of identifying COs, incentives for inefficient CO placement and cost-recovery issues.

In its simplest terms, COBAK can be boiled down to two general rules:

- No carrier may recover any costs of its customers' local access facilities from an interconnecting carrier; and
- The calling party's network is responsible for the cost of transporting the call to the called party's central office.

According to these rules, COBAK would eliminate all originating access charges, as well as any terminating access charges intended to recover the cost of the loop or the terminating central office. Moreover, the calling party "contract[s] with both a local network that will originate the call and an interexchange network that will transport the call from the calling party's local network to the called party's central office."[6]

DeGraba offered two rationales underlying his proposed COBAK rules. His rationale for the first rule is that since "both parties benefit equally from a call, then they should share equally in the cost of the facilities necessary to provide the call."[7] In initial comments, NTCA stated that the economic theories underlying COBAK are flawed and would create new regulatory arbitrage problems if adopted. NTCA also disagreed with

[5] *Id.* at 6-7.
[6] *Id*. at 10.
[7] *Id*. at 20.

DeGraba's assumption that both the calling and called parties benefit equally from a completed call, and thus should share in its cost.[8]

The rationale for the second rule is that COBAK would suppress carriers' incentives to shift transport costs to the other network: "[W]here two networks are interconnected at multiple points, the originating network has an incentive to drop the call off as soon as possible on the terminating network, and thus shift as much of the transport cost as possible onto the latter network."[9] While this may be true, it does not address the high cost of transport in rural areas or account for the different architectural configurations related to high cost-areas. The question of where to set the responsibility and accountability needs to be carefully examined, especially in areas that need support to keep local rates comparable to urban areas.

BASICS

A proposal closely related to COBAK, dubbed "Bill Access to Subscribers, (Incremental) Interconnection Costs Split," or BASICS, was proposed by Jay M. Atkinson and Christopher M. Barnekov.[10] In their December 2000 FCC paper, Atkinson and Barnekov detailed a regime under which carriers would split equally those costs that are solely incremental to interconnection, and recover all remaining costs from their respective end-user customers. The authors claimed that this default rule is competitively neutral and would encourage efficient subscription and interconnection decisions,

[8] Comments of the National Telephone Cooperative Association, *In the Matter of Developing a Unified Intercarrier Compensation Regime,* CC Docket No. 01-92, August 21, 2001, at 16-18.
[9] DeGraba, at 20.
[10] Jay M. Atkinson and Christopher C. Barnekov, *A Competitively Neutral Approach to Network Interconnection,* Federal Communications Commission, OPP Working Paper No. 34, December 2000. (Available online at ftp://www.fcc.gov/pub/Bureaus/OPP/working_papers/oppwp34.pdf.)

regardless of the type of technology used by the networks or the imbalance of traffic between carriers. BASICS presents some serious concerns, most notably a substantial implementation burden that would be imposed on regulators, and undue complexity in situations where three or more networks are involved. Consequently, while the COBAK proposal has been the subject of considerable dialogue and numerous *ex parte* meetings, BASICS has commanded far less attention and would seem to be a less likely scenario, not subject to serious consideration at this time.

FCC Proposal and Orders

On the day the Unified Intercarrier Compensation Regime NPRM was released, the FCC issued two related orders. The ISP Intercarrier Compensation Order included interim measures that would "significantly reduce, but not altogether eliminate, the flow of intercarrier payments associated with the delivery of dial-up traffic to ISPs."[11] The second order, the CLEC Access Charge Order, "address[ed] access charges that long-distance carriers pay to competitive local exchange carriers (CLECs),"[12] again on an interim basis. With the Unified Intercarrier Compensation Regime NPRM, the commission sought comment on the adoption of a bill and keep rule that would fulfill the goals of these two interim measures, while also satisfying the goal of a unified intercarrier compensation regime.

[11] NPRM, at 3.
[12] *Id.*

Implications of COBAK for Rural ILECs and Their Customers

Rural carriers face an entirely different set of challenges than their non-rural counterparts. The demographics and economics of rural America combine to make the job of the rural service provider particularly daunting. While rural end-user customers already are more expensive to serve than non-rural customers, the proposed imposition of a bill and keep regime would mean that a primary cost recovery source for rural carriers—access—suddenly would disappear. Rural carriers have no viable options outside of the regulatory regime for replacing this lost revenue. Consequently, imposition of a bill and keep regime would have far-reaching and dire implications for the Universal Service Fund, rural service providers and their customers.

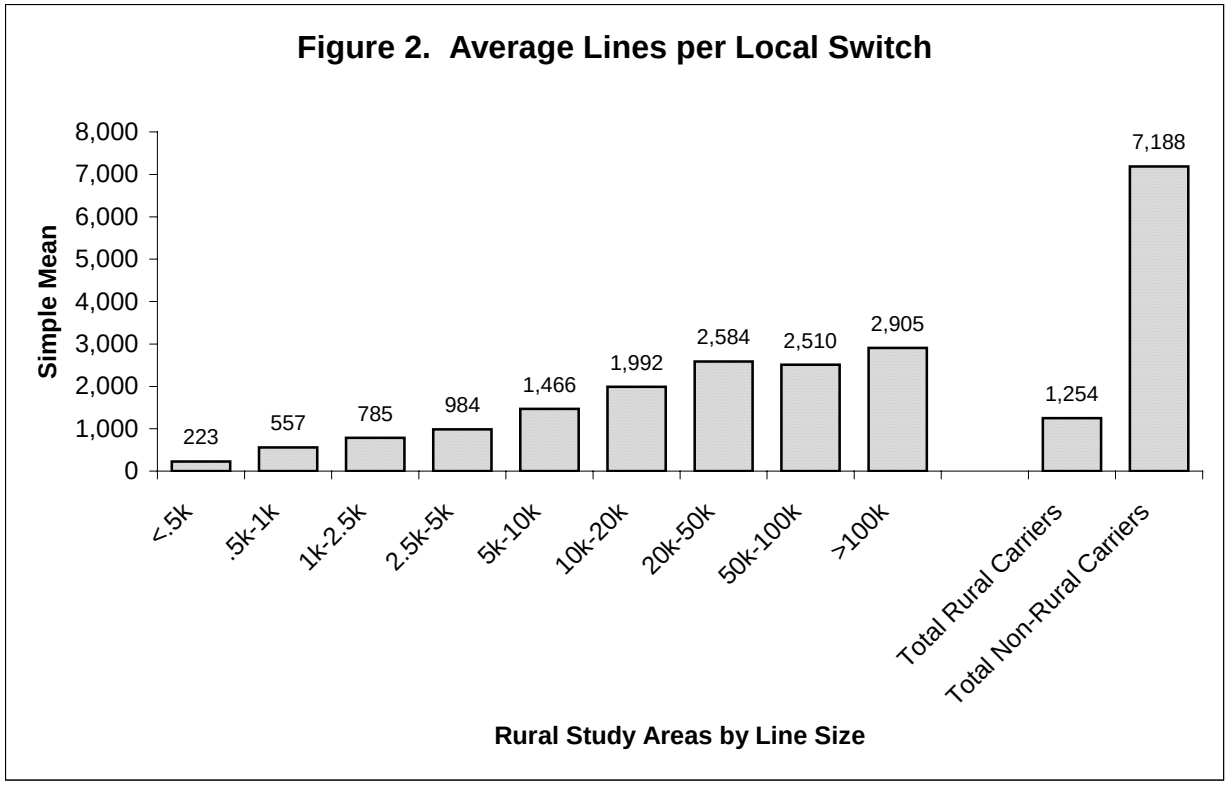
Rural Uniqueness

Low Density Results in Higher Cost per Customer

Rural is indeed different, as recognized by the Rural Task Force (RTF) in a 2000 white paper.[13] The RTF closely examined the demographics of rural versus non-rural telephone service areas. The report found that customers in rural areas are more dispersed; therefore, they are more costly to serve. On average, non-rural carriers serve 128 lines per square mile, while rural carriers serve 19 lines per square mile—a ratio of nearly seven to one.[14] As a direct result of greater population dispersion, rural carriers average far fewer lines per local switch—1,254, compared to an average of 7,188 for non-rural carriers[15] (see Fig. 2). Similarly, rural carriers average 8.13 loops per sheath

[13] Rural Task Force, *The Rural Difference*, White Paper 2, January 2000. (available online at www.wutc.wa.gov/rtf/rtfpub.nsf?open).
[14] *Id.* at 33.
[15] *Id.* at 44.

mile of cable, while non-rural carriers average 29.60.[16] While the rural statistics show vast differences between rural service areas and non-rural service areas, the statistics represent averages, not extremes. Many NTCA members serve areas that are much more sparsely populated than the average numbers indicate.



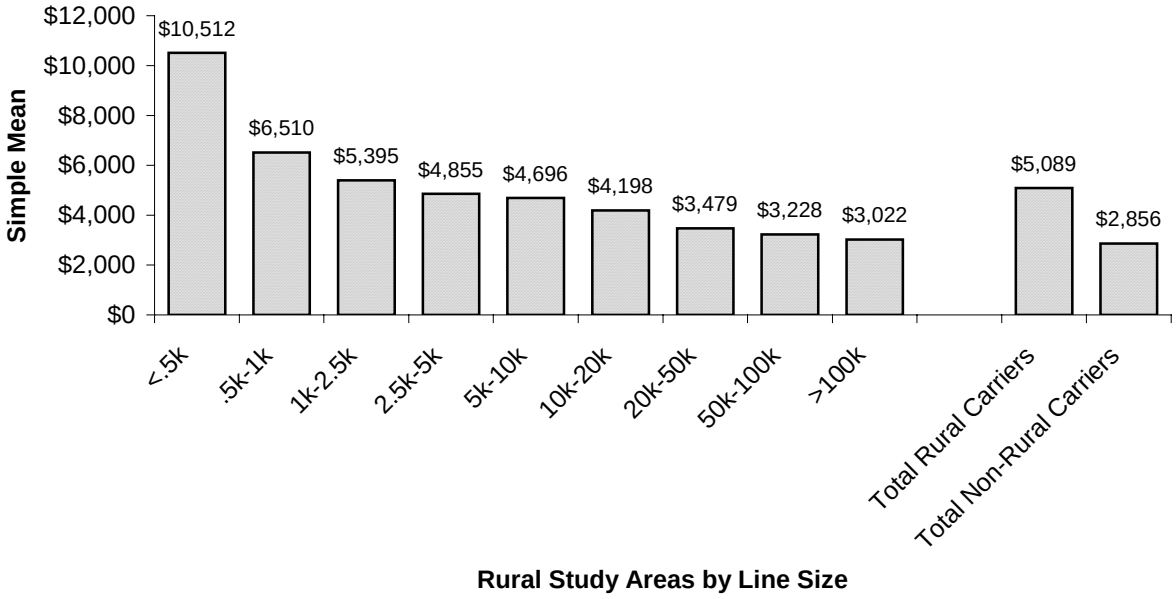
Source: Fig. 15, Rural Task Force, *The Rural Difference*, White Paper 2, January 2000.

The lower number of customers per switch or per mile of installed cable makes the cost higher in rural areas. Therefore, rural carriers must invest more in their networks to provide equivalent levels of service. The RTF found that rural carriers must invest an average of just over $5,000 per loop, while non-rural carriers invest approximately

[16] *Id.* at 45.

$2,800[17] (see Fig. 3). The RTF also reported average annual per line plant expenses of $180 for rural carriers, compared with $97 for non-rural carriers.[18]

Figure 3. Average Total Plant (Gross) Investment per Loop by Company Size



Source: Fig. 17, Rural Task Force, *The Rural Difference*, White Paper 2, January 2000.

Current/Future Rural/Urban Rate Disparity

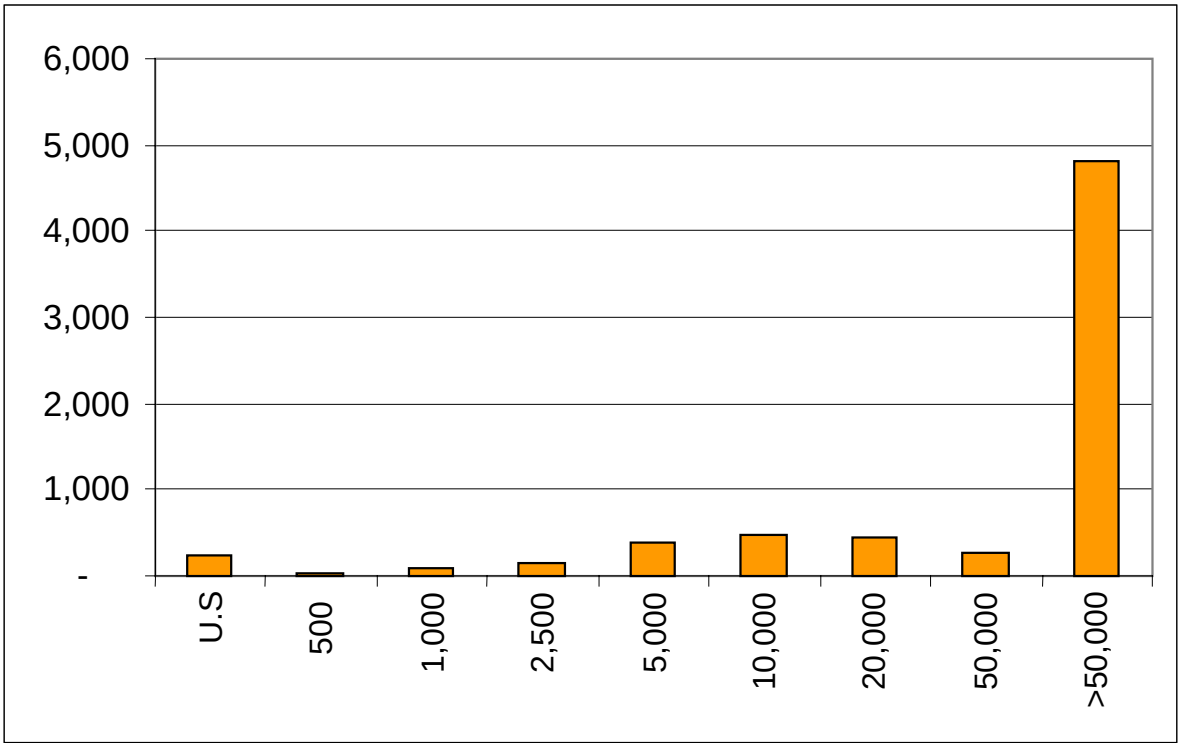
Rural Customer's Total Bill is Relatively Higher Than the Urban Customer's Bill

Although the cost to serve customers is higher in rural areas than in non-rural areas, the ability of rural customers to pay for service is lower. The RTF paper demonstrated that the median household income in rural service areas averaged $31,221,

[17] *Id.* at 47.
[18] *Id.* at 54.

while income in non-rural service areas averaged $38,983, a disparity of nearly 25%.[19] Even though rural customers have a more limited ability to pay for service, in many cases the price customers pay for telecommunications service is higher and the value received lower than for non-rural customers. Local service rates may be lower in some rural service areas, but greater population dispersion often means a greatly reduced calling scope. Thus, the number of customers that can be called per dollar of local service expenditure is substantially lower in rural areas (see Fig. 4).

Figure 4. Avg. Local Calling Area per Dollar of Basic Rate by Size

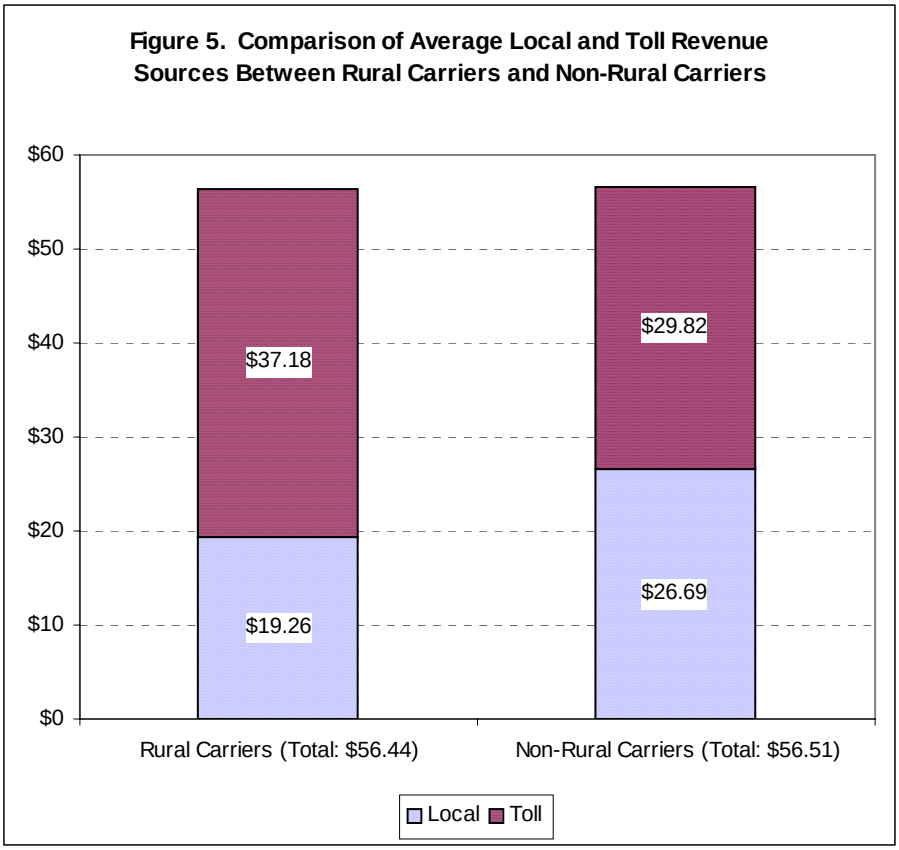


Source: NTCA 2003 Intercarrier Compensation Data Request

[19] *Id*. at 59.

The RTF report cited 1993 data indicating that the average "total bill" paid by rural customers, $56.44, was roughly the same as that paid by non-rural customers, $56.51 (see Fig. 5). Since the time of the RTF report, however, rural customers have seen their bills go up as a result of local rate increases, added surcharges and subscriber line charge increases. According to a recent NECA study, average monthly basic local service rates for rural customers grew from $20.59 in 1994 to $28.08 in 2001—an increase of 36%.[20] Over the same period, NECA found that non-rural customers' rates rose from $19.81 to $22.65, a 14% gain. Since the RTF report, rural subscriber line charges have gone up substantially. Residential and single-line business customers now pay $6.50 per line, per month, as compared to $3.50 three years ago. Most multiline business customers now pay $9.20 per line, per month, as compared to $6 in 2000.

[20] National Exchange Carrier Association, *Trends in Telecommunications Cost Recovery: The Impact on Rural America*, October 2002, at 29.

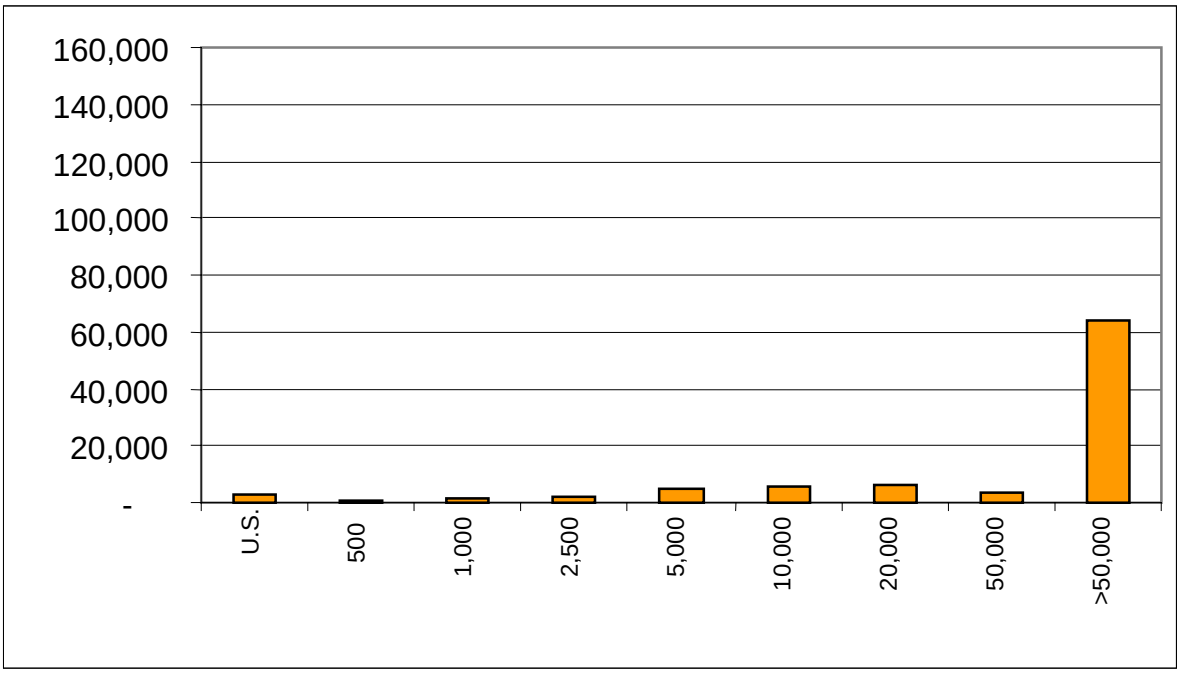


Source: Adapted from Fig. 14, Rural Task Force, *The Rural Difference*, White Paper 2, January 2000. [Original source: 1993 USF NOI. Although the 1993 data is several years old, it is the latest known data source available. The Rural Task Force believes that the data is representative of the ratios between rural carrier and non-rural carrier customers although the absolute values undoubtedly are somewhat different now than in 1993.]

However, as shown in Figure 5, rural customers spend more than their urban counterparts on toll calling.[21] NTCA data reveals that study areas with less than 50,000 lines have very small local calling areas (see Fig. 6).

[21] Rural Task Force, *The Rural Difference*, White Paper 2, January 2000, at 42.

Figure 6. Median Average Calling Area by Study Area Size



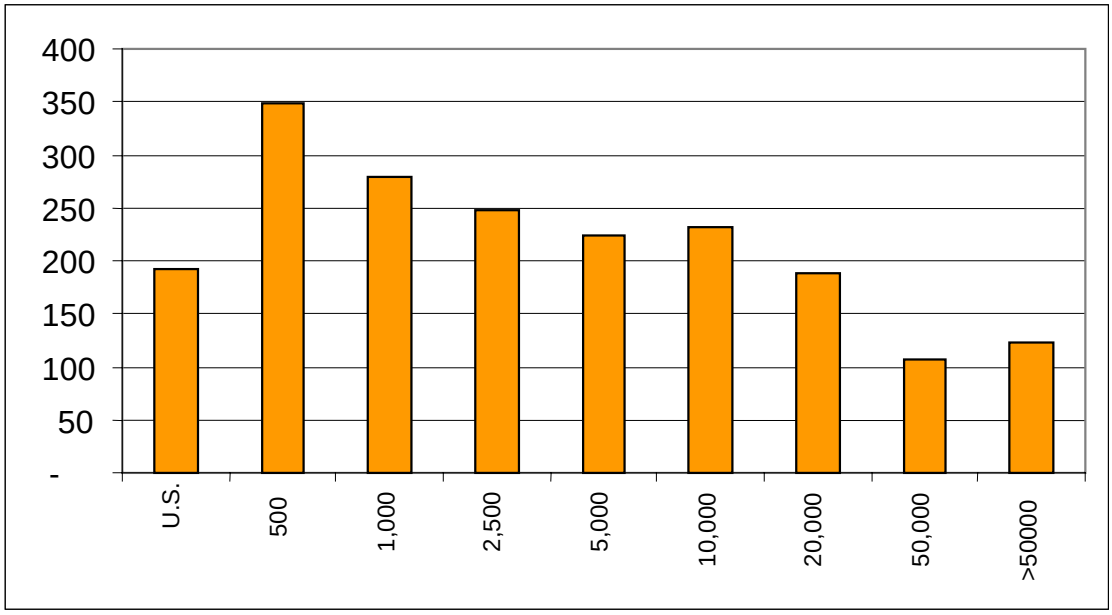
In many instances the local hospital or other essential services providers may be outside a rural local calling area, thus requiring a toll call. In addition, customers served by rural ILECs pay higher toll rates relative to their non-rural counterparts. Despite the requirement for averaged toll rates, the interexchange carriers often charge higher rates in rural areas through the offering of specialized calling plans. Many discount long-distance calling plans made available to urban customers are not even offered in rural areas. For example, AT&T's online service guide states that its discount "One Rate 7 Cents Plan," which provides interstate long-distance rates of seven cents a minute plus a monthly fee, is available to consumers served by 22 local companies.[22] The 22 companies cover 99% of non-rural areas, but only 57% of rural ILEC lines.[23] The only AT&T plan that is

[22] National Exchange Carrier Association, Inc., *Trends in Telecommunications Cost Recovery: The Impact on Rural America*, October 2002, at 30.
[23] *Id*. at 31.

available to many rural customers may be the State-to-State Direct Dialed Basic Rate Plan, with rates ranging from $0.185 to $0.35 per minute.[24]

Figure 7 shows that intrastate access minutes per line increase inversely with the size of the study area: i.e., the smaller the company, the larger the average intrastate toll minutes. This suggests that small local calling areas lead to higher intrastate toll calling and larger toll bills for rural users than for urban users.

Figure 7. State Access Minutes per Line by Size of Study Area



Source: NTCA 2003 Intercarrier Compensation Data Request

In summary, rural customers' total communications bills now may be greater than those of their urban counterparts. In recent years, both local service rates and subscriber line charges have been increasing faster for rural customers than for urban customers. Plus, toll calling and other Internet services often are more expensive for rural customers.

[24] *Id.*

These higher cost service offerings, coupled with lower per-capita income levels, means that rural customers often must spend a greater percentage of their total income for telecommunications services. Not only will bill and keep not ameliorate these disparities between the cost of rural versus urban service, implementing a bill and keep plan ultimately may make the disparity between urban and rural rates greater. Since rural companies derive a larger percentage of their revenue from access charges, it follows that elimination of these access charges will have a much larger impact per customer on rural companies than on non-rural companies. If both rural and non-rural companies were to pass on the lost revenue related to elimination of access directly to their customers, then the impact on rural customers will be substantially greater than it would be for non-rural customers.

Rural Rates Could Increase Dramatically Under COBAK

Rural ILEC costs are higher than non-rural ILEC costs and the relative dependence on access charges amplifies the effect of COBAK for rural ILECs and for rural consumers.

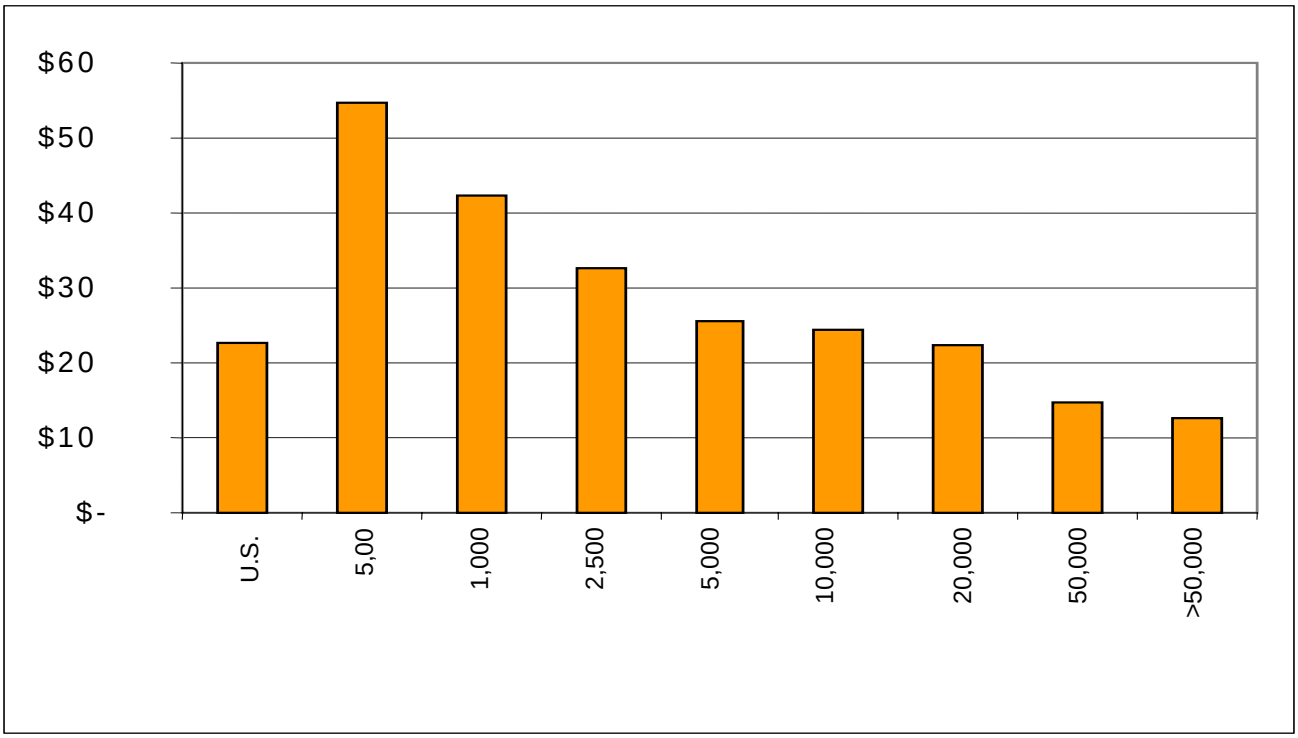
Figure 8 depicts the average decrease in monthly revenue per line for a rural ILEC with less than 100,000 access lines. If COBAK was adopted in both the intrastate and interstate jurisdictions, the average rural LEC impact would be $9.50 per line due to the elimination of interstate access charges and a corresponding impact of $12.67 per line for the elimination of intrastate access charges. The total combined impact on study areas with less than 100,000 lines is estimated to be $22.16 per line.

Figure 8. COBAK Impact/Line

Source: NTCA 2003 Intercarrier Compensation Data Request

Figure 9 breaks this impact down by size of company. This figure shows that the magnitude of the impact increases as the size of the company decreases. The impact for companies with less than 500 lines is more than $50 per line, while the impact for companies with more than 20,000 lines is less than $20 per line. Thus, the average impact is much greater for the smallest companies. Furthermore, these are average impacts per line and the impact for some companies is even much greater than average.

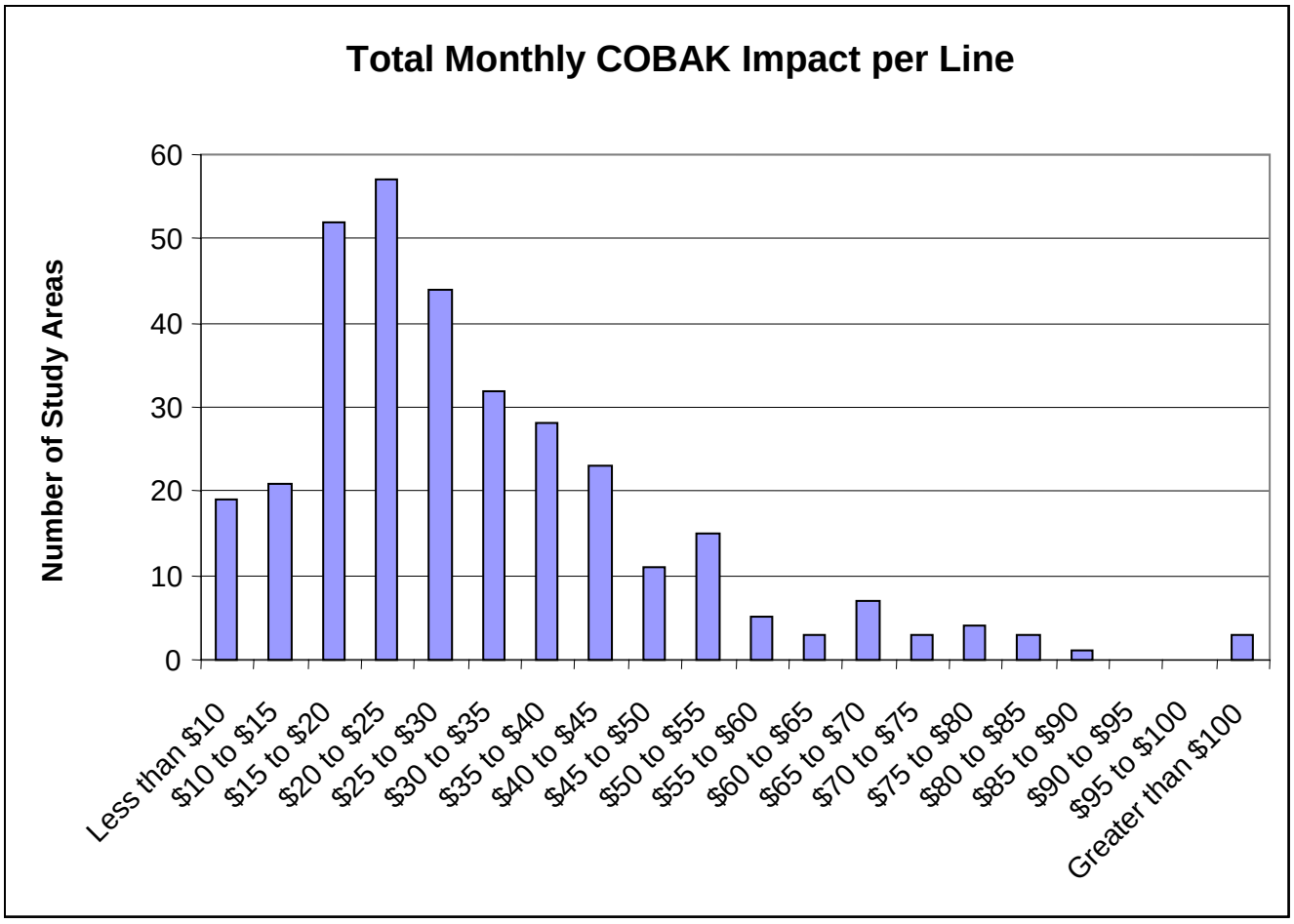
Figure 9. Total COBAK Impact/Line by Size of Company



Source: NTCA 2003 Intercarrier Compensation Data Request

Figure 10 shows the degree of variation in impact by study area. There are 40 study areas--12% of respondents--with an impact of less than $15 per line, per month. And there are 29 study areas---9% of respondents---with an impact of more than $55 per line, per month. Almost 80% of the study areas have a monthly impact between $15 and $55. It is of particular interest to note that the distribution is skewed to the right, with three study areas having an impact of more than $100 per line, per month.

Figure 10. Number of Study Areas by Size of COBAK Impact per Line



Source: NTCA 2003 Intercarrier Compensation Data Request

Financial Implications – Universal Service and End-user Customers

Assumptions

In determining the financial implications associated with movement toward a bill and keep intercarrier compensation mechanism predicated on COBAK, the work group made a number of assumptions. They include:

- The exiting rural high-cost universal service fund mechanisms, including high-cost loop support (HCLS), local switching support (LSS), long-term support (LTS) and interstate common line support (ICLS) would remain unchanged

- Rural ILECs no longer would be able to recover the cost of their networks through the assessment of originating, per-minute-of-use based switched access charges

- Rural ILECs no longer would be able to recover the cost of their networks through the assessment of terminating, per-minute-of-use based switched access charges, except for charges associated with terminating transport

- Rural ILECs would lose 50% of all intrastate and interstate special access revenue, as some customers would choose to utilize free, non-dedicated facilities for their calling needs

- In arriving at an estimate for transiting related charges that would be levied by intermediate carriers under a bill and keep regime, a per-minute rate of $0.005 was utilized.

- The total revenues of the ILEC would not change, just the distribution of the revenue sources.

Numerous bill and keep concepts have been presented by industry participants with many differing assumptions. The work group determined that the above list of assumptions were appropriate for analysis purposes at this point, however, other assumptions will need to be reviewed and incorporated as we move forward in the analysis of other concepts.

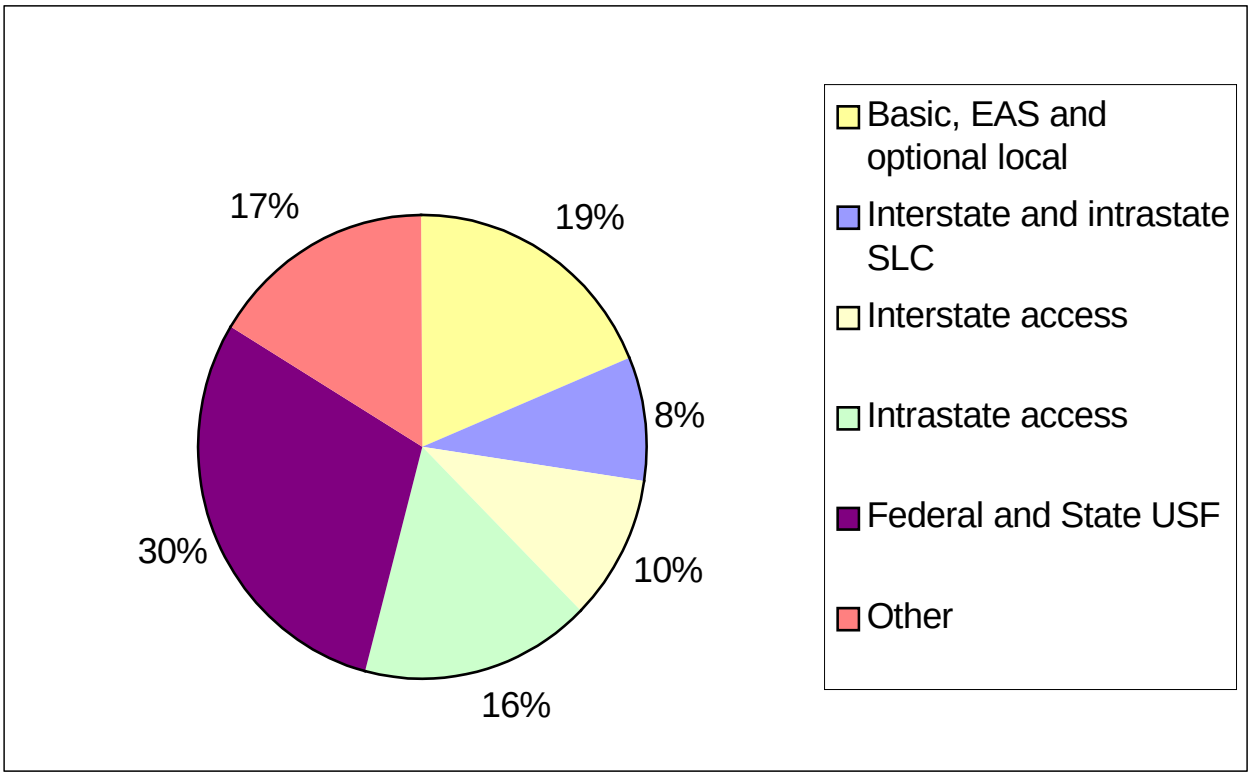
A Large Portion of Rural Telco Revenues Already are Derived from Universal Service

Moving access to bill and keep would result in a larger portion of a rural company's revenue stream coming from either universal service or end-user customer charges. Significant increases to both revenue sources are problematic. Higher rural end-user customer charges increase the urban/rural rate disparity and run counter to the goals of the 1996 Telecom Act. If bill and keep revenue shortfalls are not entirely recovered through higher customer charges, then universal service funding or some other funding source will need to make up the difference.

Figure 11 shows that, on average, 30% of a rural telephone company's revenue stream comes from universal service. Given the high dependence of rural ILECs on universal service, the continued availability of the fund is critical to the financial viability of rural ILECs.[25]

[25] An analysis of the individual responses reveals that 22% of study areas receive more than 40% of their revenue from universal service and 7% of study areas more than 60%.

Figure 11. Rural ILEC Revenue Sources



Source: NTCA 2003 Intercarrier Compensation Data Request

Elimination of $2 billion of rural ILEC access charge revenues could substantially increase the burden on the Universal Service Fund. The current contribution rate is 8.7% and was as high as 9.5% in 2003.[26] At some point the sustainability of the USF comes into question.

Aside from contributions, numerous other critical universal service issues are unresolved. For example, portability of universal service support is problematic in rural areas because under current rules, the amount of universal service support per customer may be large enough to attract uneconomic competition in the form of new entrants that

[26] FCC, CC Docket 96-45, DA 03-3866, rel 12/04/2003.

may be more interested in collecting USF payouts than providing high-quality service throughout the service area.

Replacing access with universal service funding will increase the vulnerability of high-cost companies to the problems inherent in the present universal service system. Portability and other problems associated with the designation of multiple ETCs in rural ILEC service areas need to be addressed before bill and keep should be considered.

Bill and Keep Will Shift Costs to Rural Rates in Different Ways

As noted previously, replacement of interstate switched access charges with COBAK would result in a decrease in monthly revenue per line of $22. If this decrease was passed on to the end-user, it is equivalent to a $22 increase in monthly rates. Further, the average impact per line varies by company size; for companies under 500 lines, the impact is more than $50 per line, per month. An analysis of state data indicates a wide degree of differences among the states, which cannot be explained by differences in the companies and points to differences in state regulatory rules.

To make matters worse, there is no assurance that rural long-distance customers would see lower toll rates as a result of movement to a bill and keep regime. Under bill and keep, IXCs would not pay originating access charges, but this reduction may not be reflected in retail long-distance rates. Furthermore, a rural long-distance customer could face even higher per-minute toll charges in the future, if LATA tandem owners impose charges to transit or transport traffic across the tandem to interconnect service providers.

On the micro level, the impact of moving to bill and keep will vary widely among companies and states. The specific impact depends, in large part, on the geographic area

the company serves. High-cost areas will witness a greater impact than low-cost areas. The impact also will depend on the degree to which each state has completed access charge reform. States that have not completed access charge reform and do not have a state universal service fund are the most vulnerable. Generally, rural ILECs that have the highest access charges will suffer the greatest impact.

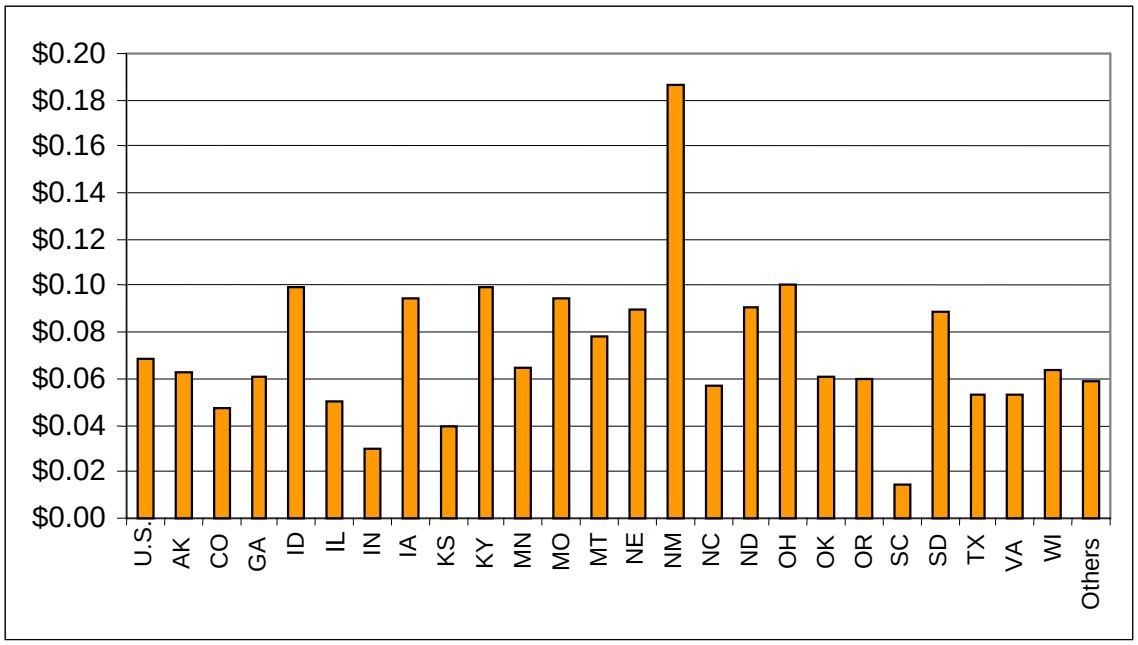
Bill and Keep Will Affect Jurisdictional Cost Allocations and State Authority Over Local Rates

In the intrastate jurisdiction, many rural ILECs remain regulated by their respective public service commission either on a rate-of-return basis or in accordance with an alternative form of regulation. With the exception of a few states, pooling mechanisms no longer are utilized for the recovery of intrastate - interexchange - related costs. In some states, rural ILECs are considered toll providers (in the intraLATA jurisdiction) and in other states, access providers. With regard to the intrastate interLATA jurisdiction, most rural ILECs remain access providers. Accordingly, rural ILECs assess intrastate-switched and special access charge rates for the origination and termination of interexchange traffic in accordance with approved intrastate access tariffs.

Based on the NTCA's analysis, the average intrastate-switched access charge rate for rural ILECs is approximately $0.069 per minute. The $0.038 difference between the composite-switched intrastate rate and interstate-switched access rate of $0.031 demonstrates one of the major difficulties with an interstate-only bill and keep regime, namely the increase in arbitrage of access rates that would occur if a bill and keep mechanism were to be adopted only in the interstate jurisdiction.

While the average composite-switched intrastate access rate for the NTCA data is $0.069, the rate varies by state and by rural ILEC within each state. Figure 12 illustrates the average composite intrastate-switched access charge rate, by state, for respondents to the data request.

Figure 12. Intrastate Access Rates per Minute



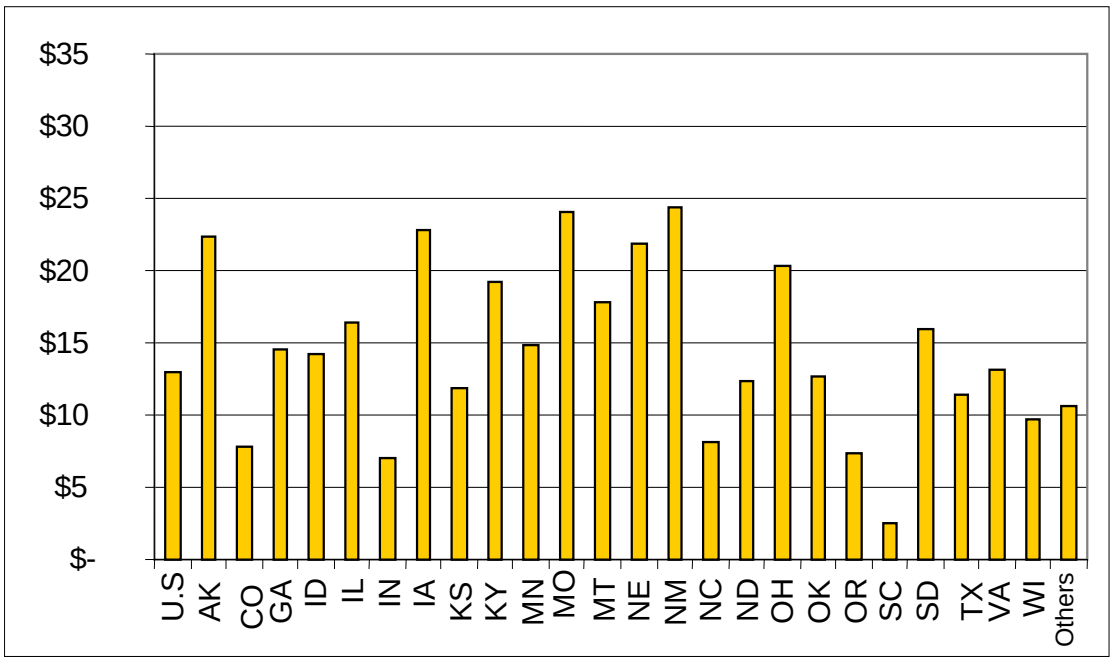
Source: NTCA 2003 Intercarrier Compensation Data Request

The rates vary by state, not only because of cost differences, but also because some states have more transport facilities than others. Also contributing to the variation in state rates is the type of compensation mechanism in place and the existence of an intrastate universal service fund. Those states with universal service funds will tend to have lower intrastate access rates.

If state regulatory authorities were faced with the prospect of eliminating intrastate switched access charge rates and moving to a bill and keep regime, rural end-user subscribers would see significant increases in rates for basic local exchange service.

Figure 13 shows the elimination of intrastate switched access charge revenues on an access line basis. The average impact for all respondents is approximately $13. State impacts vary from almost $25 per line in Missouri and New Mexico to less than $3 in South Carolina.

Figure 13. Intrastate COBAK Impact per Line



Source: NTCA 2003 Intercarrier Compensation Data Request

Any move to adopt a bill and keep regime at the federal level, either on a mandatory or optional basis, will have significant implications in the intrastate jurisdiction. The data shows the impact on the intrastate level to be more harmful to rural LECs than in the interstate jurisdiction. It appears inconceivable that a bill and keep mechanism can or should be adopted in the federal arena without addressing intrastate jurisdictional implications at the same time. Absent a court decision reversing *Smith v.*

Illinois Bell Tel. Co.[27] requiring that some form of jurisdictional separations continue, it may prove very difficult and dangerous to take any action regarding implementation of a bill and keep mechanism until the jurisdictional matter is resolved.

Bill and Keep May Eliminate Consumer Choice of Toll Providers

Currently, LECs (and to a lesser extent IXCs) have one cost-recovery mechanism for trunk and transport network expenses and a separate recovery mechanism for traffic-sensitive expenses. Under this structure, traffic-sensitive costs are recovered through per minute switched access charge rates.

The existing "pay per minute of use" regime is based on an equal access regime that offers customers a choice of carrier for interexchange toll service. The IXCs have benefited from having a direct retail relationship with a customer receiving local telephone service from a rural ILEC. IXCs have been able to establish this retail relationship by paying the rural ILEC for use of facilities to originate and terminate toll calls rather than building their own facilities to the customer.

IXCs indirectly guided the efficient design, construction and maintenance of interconnecting network facilities based predominately on usage. When an individual IXC's usage of the switching and transport network is significant, dedicated interconnection facilities are ordered. Where usage is more limited, IXCs use common trunk groups to realize the efficiencies obtained by sharing network costs.
This equal access regime contrasts sharply with the relationship that exists between wireless providers and their customers.

[27] *Smith v. Illinois Bell Telephone Co.*, 282 U.S. 133, 51 S.Ct. 65 (1930).

Wireless services are marketed as a bundled package of peak-time minutes that may be used anywhere in the nation or within a specified area, usually a major trading area (MTA), or on an "*a la cart*"' basis. Customers have a choice of wireless providers, but no choice of a separate provider for interexchange toll services. Since the competition among wireless carriers is strong in urban areas, wireless customers do not seem particularly concerned about the lack of a separate choice of IXC providers.

Customers buy a package of both local and long-distance service from the same provider. In the wireless market, the provider has a retail relationship with the customer for both local and long-distance and the provider contracts with third parties to transport wireless calls that leave their network.

The adoption of bill and keep could mean the end of today's equal access policy and the elimination of customer choice in long-distance carriers. If rural ILECs no longer receive compensation from IXCs for handling IXC traffic, then rural ILECs should be free to contract with IXCs for transport and termination services on a wholesale basis, and the IXCs no longer should enjoy the benefits of a direct retail relationship with the customer. The access charges previously paid by IXCs now will be recovered by the ILEC in the form of toll charges, higher end-user fees or universal service funding. So what would this mean for the customer? The rural ILEC would market both local and toll services to the customer, just like the wireless providers, which could result in their customers paying higher toll and or local charges. The economic advantages of competitive long-distance service no longer would be available to rural customers.

Setting aside the question of customer choice, is this a simple transfer of dollars paid by the end-user customer from the IXC to the rural ILEC? Not under COBAK!

"[M]ore specifically, under COBAK, the calling party's *local carrier* is responsible for carrying the call from the calling party to the point of presence (POP) of the calling party's interexchange carrier"[28] (emphasis retained). Small rural ILECs often do not have low cost access routes to IXC POPs. Call volumes from rural exchanges may be insufficient for the rural ILEC to construct multiple call origination routes. COBAK rules imply that a rural LEC would be responsible to deliver the call to the IXC's network or the called party's network. Furthermore, there is no reason to believe an IXC would reduce its retail price by the same amount as the cost reductions it realizes from elimination of the payment of access charges to the rural ILEC.

DeGraba assumes that the solution is simple: "[S]pecifically, the calling party's network can always satisfy Rule 2[29] by constructing transport facilities to the called party's central office or by leasing transport facilities from another carrier."[30] For most rural ILECs, interconnection routes are limited and frequently are constrained by the high cost of plant construction in remote geographic areas, and there may not be any leasing option.

It appears likely that total costs for rural customers will be much higher under bill and keep than under today's access regime, and rural customers would *lose* the option of choosing their retail interexchange provider in the bargain.

[28] DeGraba, at 10.
[29] DeGraba's Rule 2: "*For calls traversing two networks, the calling party's network is responsible for the cost of transporting the call to the called party's central office.*" (*Id.* at 9.)
[30] *Id*. at 21.

The Elimination of Pooling would Increase Regulatory Burdens and Destabilize Small Carriers

The existing interstate access regime was put in place as a result of the 1982 consent decree that broke up AT&T and created the regional Bell operating companies. By the time of the break-up, the assignment of certain network costs to the interstate jurisdiction for recovery was a long-established component of public policy, and a new system was needed to assure that ILECs would continue to be compensated by IXCs for use of the ILEC's network, at rates that were fair to all.

While there have been many changes over the years, and the access-charge system is by no means perfect, it continues to be useful in meeting the original goals established for it: 1) the elimination of unjust discrimination or unlawful preferential rates, 2) the encouragement of network efficiency, 3) the prevention of uneconomic bypass, and 4) the continued assurance of universal service.[31]

As discussed in the section above, the need for fair and reliable interstate cost recovery is especially important in rural areas, due to their higher cost and demographic characteristics. The importance of access charges to the financial stability of rural ILECs makes interstate pooling a critical component of cost recovery for many of them. Virtually all rural ILECs participate in the interstate pooling process administered by the National Exchange Carrier Association (NECA). Pooling provides rural carriers with administrative efficiencies and risk management benefits that they would not be able to achieve alone. This, in turn, benefits rural customers in several ways.

[31] MTS and WATS Market Structure, CC Docket 78-72, *Third Report and Order*, 48 Fed. Reg. 10319 (1983).

First, pooling helps to reduce risk to any one company by stabilizing the cash flow of normal operations and offsetting the effect of unexpected demand reductions or increased costs. To receive payments from the pool, cost companies initially input cost estimates, and then update these costs as their cost studies are completed.[32] This process allows the companies an opportunity to input cost adjustments each month and receive appropriate adjustments in payments. Unexpected risks may include natural disaster, loss of a large customer or, as seen recently, the bankruptcy of a large IXC. Reducing the financial risk to companies benefits their customers by helping to avoid the potential rate shocks and fluctuations that could occur if each ILEC had to bear all of the risk alone.

Second, the pooling of costs allows for the effective averaging of access rates in rural areas. As a result, the areas that have higher costs do not need to reflect company-specific access charge rates that could deter IXCs from entering those markets. Third, pooling helps ensure that rural ILECs have access to the capital they need to build and maintain their networks by providing adequate cost recovery and a fair rate of return on those investments.

Finally, pooling is beneficial to the FCC in regulating the more than one thousand rural ILECs serving this country. If pooling didn't exist, the increased cost and administrative burden of regulatory oversight on both the FCC and the rural ILECs would find its way back to rural end-user customers in the form of higher rates for service.

While larger ILECs in more competitive markets may believe there are great benefits from bill and keep, in rural areas that is not the case. Movement away from access charges not only will significantly increase universal service support payments or

[32] Average schedule companies receive payments based on payment formulas intended to match payments that would have been received by cost companies.

end-user rates, it also could have a negative impact on the successes the pooling process has had in helping rural carriers achieve the original goals of the access-charge regime.

Network Considerations – Transport, Point of Termination and Transiting

Bill and keep changes the paradigm as it relates to network interconnection policies and architecture that have been built over the decades. Issues surrounding transport, transiting and point of interconnection will take on new significance if bill and keep is implemented as a compensation regime for the rural ILECs. These issues relate to how and where a rural ILEC interconnects its facilities with other carriers – no matter whether the carrier is an IXC, CLEC, CMRS provider or another ILEC.

These issues impact rural ILECs differently than urban carriers due to the more remote rural location of central offices. This remoteness results in transport distances much longer than for urban carriers. In addition, the rural ILECs depend on the tandem owner to transit a call to other connecting carriers. More often than not, the rural carrier does not have alternative providers for these services.

Bill and Keep Shifts Transport Cost Burdens Away from Carriers that Utilize ILEC Transport Facilities

Today many rural ILECs do not have direct connections with IXCs or other carriers. In many cases, rural ILECs transport interexchange calls to the LATA tandem, where the call then is switched (or transited) to the customers' presubscribed IXC or another carrier. The LATA tandem usually is owned and operated by an RBOC or another large ILEC. The rural ILEC most often owns a portion of the transport facilities to the LATA tandem. In today's access charge environment, the rural ILEC charges the

retail IXC for use of its facilities to transport traffic to or from its point of interconnection (POI). The LATA tandem owner charges the retail IXC for use of its portion of the facility, including a charge for use of the tandem switch. Both ILECs charge the retail IXC in accordance with filed and approved state and interstate access tariffs for recovery of their respective network investment.

Under a bill and keep regime, the rural ILEC would be responsible for the cost of the facility used to transport the traffic to the retail IXC POI, including paying the LATA tandem operator for use of its facilities. In other words, the RBOC, or other large ILEC, would assess transport and LATA tandem charges to the rural ILEC instead of the retail IXC that actually used the facilities for providing its retail service.

Under a bill and keep regime, transport costs are shifted to the rural ILEC, even though these costs inherently are a cost of doing business for the retail IXC. One option for rural ILECs is to recover transport facility costs through a surcharge on interexchange calls. Thus, the end-user customer placing an interexchange call incurs a charge from the ILEC in addition to the IXC's charge.[33] Alternatively, all end-user customers could share equally in the recovery of the transport investment through increased local exchange rates, whether they place interexchange calls or not. Qwest also has proposed an alternative that would limit the ILECs transport obligations to the edge of its service area.[34] If transport costs are shifted to the rural ILECs, and the rural ILEC has the responsibility to transport traffic to the retail IXC's POI under a bill and keep regime, the

[33] Today, many rural ILECs are access providers that bill access charges to the retail IXCs, which in turn have the retail relationship with the end-user customer making the interexchange call. The shifting of the transport and transiting costs to the rural ILEC has the effect of making the rural customer pay both the rural ILEC and the IXC for the call. In many cases, the rural ILEC does not offer interexchange services. Bill and keep would force rural ILECs into a business that may not be financially viable.
[34] See Qwest proposal for bill and keep at the "Edge," CC Docket 01-92, March 27, 2001.

retail IXC providers now have a financial incentive to disconnect any direct connections they currently have with rural ILECs and relocate existing POIs.

Bill and Keep could Allow IXCs and Others to Relocate Points of Interconnection at the Expense of the RLECs

A point of interconnection, or POI, is the physical location where a call is handed off to another carrier.[35] Most often POIs are located in urban areas where carriers gain network efficiencies by aggregating traffic from several ILECs. An IXC locating its POI in an urban area minimizes transport distance and, subsequently, costs for the large ILECs. Conversely, rural ILECs lack the significant amount of traffic volume to entice IXCs to establish POIs in their service area and therefore are required to build long distances to reach the IXC's POI. While these costs are partially covered by per-minute access charges under today's access-charge regime, as referenced above, transport costs would be shifted to the rural ILEC's end-user customer under a bill and keep compensation regime.

Bill and keep may lead to IXCs rearranging or relocating existing POIs, with the ultimate benefit of reduced expenses to themselves. Bill and keep brings to the forefront several network policy questions that must be considered by the FCC or the Federal-State Joint Board if ordered. For example:

- Can IXCs relocate their POI in a manner that disadvantages the rural ILECs? Rural ILECs will be at the mercy of the IXCs in any negotiation of POI locations. Moving the POI simply shifts costs associated with interexchange calls to the rural ILEC and its customers and is to the financial benefit of the IXC. Rural areas have long dealt with higher costs in the loop and shifting additional costs to the rural customer will only serve to further exacerbate the problem of affordable service in rural areas and undermine the goals of universal service.

[35] The POI establishment of CLECs and CMRS carriers have similar issues as IXCs, however, for brevity purposes, this paper will focus on IXC POIs.

- If an IXC moves its POI, would the rural ILEC be obligated to transport calls to the carrier, regardless of the costs?
- Would rural ILECs be allowed to make the economic decision to remove an IXC from their list of carriers available to end users, if the cost of transport increases significantly?
- Is equal access still viable under a bill and keep regime?

Policies should be adopted that define carriers' responsibilities regarding establishment and rearrangement of POIs. Any policy with respect to network connectivity should give all parties equal flexibility to make economic decisions and not competitively disadvantage the rural ILECs.

Transiting Rates and Arrangements Must Accommodate Small ILECs and Rural Customers

A transiting (or through-put) function is a switching and transport function that allows one carrier to send local traffic to a third-party carrier through the use of another carrier's tandem. In other words, the originating call does not terminate to an end-user customer of the tandem owner but terminates to a third carrier's end-user customer. Typically, the carrier that originates the call will pay for the transiting function. In today's access environment, the tandem owner "transits" a toll call through its access tandem between rural ILECs and IXCs. In that environment, transiting services generally are for local calls that originate and terminate on third parties' networks and are routed through a local tandem, such as local calls to and from CMRS and CLEC carriers. The vital role of transiting services has become even more critical as the number of competitive carriers has mushroomed.

The rural ILECs' concerns related to transiting are not necessarily new; however, without defined compliance policies and rules, concerns will be only heightened with bill

and keep. More often than not, the rural ILECs do not have direct network connections with many carriers that are using the transiting services of a RBOC or another tandem owner. Without the ability to control what carriers' traffic is being sent through the tandem, the rural ILEC finds itself terminating calls without compensation. Proponents would argue this situation could be cured with bill and keep. However, rural ILECs believe that the current system is adequate, if compensation measures are enforced.

Since all carriers in a service area or market must at some point connect to the area tandem, there is efficiency in utilizing the tandems to route calls to other carriers instead of building a direct connection to each carrier. This critical network infrastructure cannot be either economically or readily duplicated. As a practical matter, the most feasible and cost-effective option for most rural ILECs is to use the RBOC's tandem for transiting functions.

However, the RBOCs are seeking to deregulate transiting, as well as price the service based on market rates.[36] The RBOCs are taking the position that they are under no obligation to perform this function and even if they were, forward-looking cost based pricing standards do not apply. Given that the RBOCs and other large carriers have the only facilities to provide transiting services, they should not be able to exploit this critical network infrastructure. A tandem owner may decide to charge exorbitant transiting rates, in effect forcing rural ILECs to pay excessive amounts for a service where there are no other available options, or cease providing transiting service to rural ILECs at all.

[36] *CMRS NPA/NXX Arrangements with Third Party ILEC Rate Centers*, BellSouth *ex parte* presentation before Bryan Tramont, Senior Legal Advisor to Chairman Michael Powell, July 30, 2003, p. 11.

Such situations leave the rural ILECs and their customers in a precarious position. For public interest reasons, transiting prices should be fair and equitable, as well as subject to regulatory oversight.

In conclusion, bill and keep only provides economic benefits to IXCs and the RBOCs by shifting the responsibility of transport costs from the larger IXCs and RBOCs to the rural ILECs. This situation is further exacerbated if the RBOC or tandem owner is allowed to charge market-based rates for transiting.

III. CONCLUSIONS

In 2001, NTCA urged the commission not to proceed with its rulemaking on intercarrier compensation. NTCA stated that changing intercarrier compensation rules in the manner proposed would have a dramatic and perhaps devastating impact on consumers living in rural areas and the carriers that serve them.[37] In the intervening time, nothing has happened to change the issues raised by NTCA in 2001.

Urban telecommunications carriers began to actively seek regulatory approval to replace the existing access-based intercarrier compensation mechanism with a bill and keep mechanism to serve their own self-interests. Their goal is to improve their bottom line by increasing revenues and decreasing costs.

The analysis of company data and the work group's study of the issues support the broad conclusions reached in 2001:

1) Universal service remains essential for end-user customers served by rural ILECs. The existing universal service mechanisms already are vulnerable, and resorting to them

[37] NTCA Comments in CC Docket No. 01-92, at iv.

alone will not address rural carriers' need for adequate compensation for use of their facilities. "A policy of universal service and its financial support is vital to the continued viability of rural telephone companies and the communities they serve."[38] The commission is obligated by the 1996 Telecommunications Act[39] to follow certain principles. "First and foremost, the commission is to preserve and advance universal service. In furtherance of that goal, the commission is to ensure service affordability, access and comparability."[40]

2) Bill and keep will cause a disparate and precipitous increase in rural end user charges. "[W]ithout sufficient support, the cost of service for consumers living in high-cost areas will rise far beyond the cost for those living in low-cost urban areas. Neither the service, nor the price paid for it will remain comparable as required by the act."[41] Additionally, "[t]he commission's bill and keep proposals force each carrier to recover the costs of origination and termination from its own end-user customers. This scheme will necessarily push end-user rates up and blur the line between interstate and intrastate cost allocation and ratemaking."[42] When assessing rate comparability, the impact on all end-user rates, and not just nationwide average end-user rates, should be considered. "The commission must look at all end-user charges to determine affordability and not determine that on average, rates are affordable."[43]

3) Universal service and intercarrier compensation are closely intertwined. "Because a change in the intercarrier compensation rules will affect universal service, the act

[38] *Id.* at 5.
[39] Communications Act of 1934 as amended by Telecommunications Act of 1996, Pub.L. No. 104-104, 110 stat. 56 (1996) (The Act). Hereafter, citation of the act is by section number.
[40] NTCA Comments in CC Docket No. 01-92, at 6.
[41] *Id*. at 10.
[42] *Id*. at 9.
[43] *Id.* at 10. The 10th Circuit found that comparing rates within a state's borders and among states nationwide was inadequate. *Qwest v. FCC*, 2001 WL 864222 at *9.

dictates[44] that the commission refer the matter and receive recommendations from a federal-state joint board."[45]

4) Bill and keep will shift costs between jurisdictions. The commission needs to refer separations issues to the Joint Board on Separations so that the interstate and intrastate impacts can be adequately considered. "Before the commission can adopt and implement a new unified inter-carrier regime, it must first refer the NPRM to the Federal-State Joint Board on Separations. The act requires[46] that the FCC refer to the Joint Board on Separations for any proceeding regarding the jurisdictional separation of common carrier property and expenses between interstate and intrastate operations instituted pursuant to an NPRM."[47] Referral to the Joint Board on Separations is necessary to avoid improper pre-emption of state commission authority. "In *Smith v. Illinois,*[48] the Supreme Court stated that 'proper regulation of rates can be had only by maintaining the limits of state and federal jurisdiction' to determine whether rates would result in confiscation. The court held that when distinct jurisdictional limits exist as to the determination of reasonable rates, some form of jurisdictional separations must occur. The court established that 'reasonable measures [are] essential' and indicated that such measures should not 'ignore altogether the actual uses to which the property is put.'"[49]

5) Rural areas may require a different solution. Bill and keep is not about efficiency for rural ILECs or their end users. "Both the COBAK and BASICS regimes are touted as economically sound methods of eliminating much of the inequity and inefficiency that

[44] §254(a)(1).
[45] NTCA Comments in CC Docket No. 01-92, at 6.
[46] §410(c).
[47] NTCA Comments in CC Docket No. 01-92, at 14.
[48] *Smith v. Illinois Bell Telephone Co., supra* note 27.
[49] NTCA Comments in CC Docket No. 01-92, at 15.

exists in today's telephone industry. While these regimes may pose a theoretical solution to some of the problems currently plaguing 'calling party network pays' (CPNP) regimes, in reality, implementation of either plan would create both winners and losers. Unfortunately, the losers would likely be customers residing in high cost areas, those who could afford it the least."[50] The commission should not terminate the existing access-charge regime for rural ILECs without fully evaluating the implications of retaining access charges and the impact of adopting an alternative intercarrier compensation mechanism on rural end users. A "one-size-fits-all" approach is not the right answer. The uniqueness of rural areas discussed earlier in this paper strongly points to the need for a tailored approach for rural areas.

6) Regulatory arbitrage can be addressed in many ways. The commission must come to grips with regulatory arbitrage issues. Many say the existing access charge regime is broken and cannot be fixed. Strict enforcement of existing rules would greatly reduce arbitrage. All telephone-like traffic, including VoIP provided through the Internet or via cable modems, should be treated on the same basis. These services benefit from the ILEC network and should contribute to the maintenance of the network, especially when they are being provided special treatment to offer competitive services. "The continuation of the E[nhanced] S[ervice] P[rovider] exemption will only further facilitate regulatory arbitrage and uneconomic incentives for Internet telephony.[51] Adoption of a bill and keep mechanism will not necessarily resolve arbitrage issues. Several reply

[50] *Id*. at 16.
[51] Western Alliance Initial Comments at 5.

comments to the original notice cautioned the commission that the imposition of COBAK or BASICS likely could result in the creation of new regulatory arbitrage problems.[52]

[52] *See*, for example, Initial Comments of Global Naps, Inc. at 7-14, Maryland Office of the People's Counsel at 2-6, Office of Public Utility Counsel of Texas at 37-43 and Time Warner Telecom at 19-22.